The Most Advanced & Innovative RF Solid State Amplifiers In The World Today. Delivering 1 to 16,000 Watts & Beyond. AR's RF Amplifier Products Cover DC to 1000 MHz.

Our amplifiers perform beyond the norm, beyond expectations, and way beyond the abilities of other test amplifiers. The performance, mismatch capabilities, power, reliability, and the value of AR amplifiers have become legendary. All our RF Solid State Amplifiers have modulation capability that will faithfully reproduce AM, FM or Pulse Modulation appearing on the input signal. The AM peak envelope power is limited to specified power.

"A" Series-Solid State: DC to 400 MHz, 25 to 16,000 watts.
"W" Series-Solid State: DC to 1,000 MHz, 1 to 4,000 watts.

Subampability™: (sub-amp-ability). noun:
The ability to use an amplifier individually, or as a building block, upon which power can be added incrementally.

Add Power To Existing Amps.

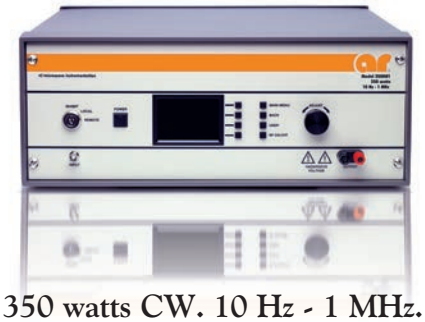
Many amplifiers within our "A" & "W" Series are designed so that the power can be expanded with a relatively simple upgrade. Of course, the amplifiers can still be used individually when needed.

40AD1

40 watts CW. dc-1 MHz.

Rated Output Power	40 watts
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	
Typ. 50 watts / Min. 40 watts	
Power Output @ 1dB compression	
Typ. 40 watts / Min. 25 watts	
Flatness	±1.5 dB max.
Frequency Response	dc - 1 MHz instantaneously
Gain (at max. setting)	45 dB min.
Gain Adjustment (continuous range)	18 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.
Output Impedance	50 ohms, VSWR 2.0:1 max.
Mismatch Tolerance*	
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.	
Harmonic Distortion	Minus 25 dBc max. at 25 watts
Third Order Intercept Point	54 dBm typ.
Primary Power (user must specify)	
90 - 135 / 180 - 270 VAC	
50 / 60 Hz, single phase, autoranging 400 watts max.	
Connectors	
RF Input	Type N female on front panel
RF Output	Type N female on front panel
Cooling	Forced air (self contained fans)
Weight	16 kg (35 lb)
Size (WxHxD)	
50.3 x 15.5 x 30 cm / 19.8 x 6.1 x 11.8 in	

350AH1



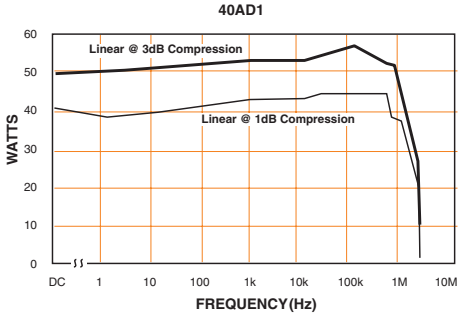
350 watts CW. 10 Hz - 1 MHz.

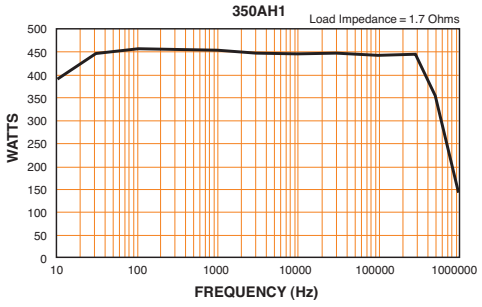
Operation	Class AB Linear
Power Output (1.79 Ohm load)	
CW, min.	350 watts, 10 Hz - 300 kHz 350 - 55 watts, 300 kHz - 1 MHz
Voltage Output, min.	25 Vrms, 10 Hz - 300 kHz 25 - 10 Vrms, 300 kHz - 1 MHz
Current Output, min.	14 Arms, 10 Hz - 300 kHz 14 - 5.5 Arms, 300 kHz - 1 MHz
Flatness	±1.0 dB, 10 Hz - 300 kHz ±4.0 dB, 300 kHz - 1 MHz
Frequency Response	10 Hz - 1 MHz instantaneously
Input Signal	0 - 2 Vrms
Gain (Power)	47 dB min., 10 Hz - 300 kHz 39 dB min., 300 kHz - 1 MHz
Gain Control Range	15 dB min.
Input Impedance	600 ohms typ.
Output Impedance	<1Ω typ.
Mismatch Tolerance	100% of rated power without fail
Primary Power	90 - 260 VAC 47 - 63 Hz, single phase, 1200 watts max.
Connectors	
RF Input	Type BNC female on front panel
RF Output	5-way binding posts on front panel
Remote Control	
IEEE-488	24 pin female
RS-232	9 pin subminiature D female
USB	Type B female
Ethernet	RJ-45
Safety Interlock	15 pin subminiature D
Cooling	Forced air (self contained fans)
Weight	25 kg (55 lb)
Size (WxHxD)	
50.3 x 19.9 x 37.6 cm / 19.8 x 7.85 x 14.8 in	

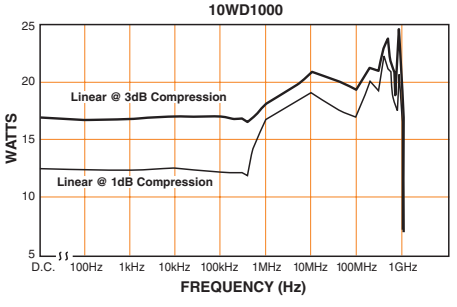
10WD1000

10 watts CW. dc-1000 MHz.

Rated Output Power	10 watts min.
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	
Nominal 19 watts / Min. 12.5 watts	
Power Output @ 1dB compression	
Nominal 17 watts / Min. 10 watts	
Flatness	±1.0 dB typ. / ±1.5 dB max.
Frequency Response	
DC - 1000 MHz (In two bands selected automatically, manually or buss)	
Gain	40 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance*	
100% of rated output power. Will operate without damage or oscillation or foldback with any magnitude and phase of source and load impedance.	
Harmonic Distortion	Minus 20 dBc max. at 10 watts
Third Order Intercept Point	50 dBm typ.
Primary Power	
85 - 264 VAC	
47 - 440 Hz, 500 watts max.	
Connectors	
RF Input	Type N female on front panel
RF Output	Type N female on front panel
Remote Interfaces	
IEEE-488	24 pin female
RS-232	9 pin Subminiature D female
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	20.5 kg (45 lb)
Size (WxHxD)	
50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in	

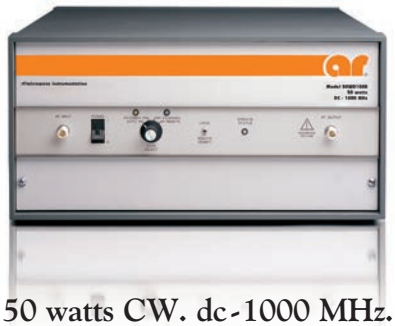






* See Application Note #27A at www.arworld.us/appnote27/

50WD1000



50 watts CW. dc-1000 MHz.

Rated Output Power 50 watts min.
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 60 watts / Min. 40 watts
Power Output @ 1dB compression
Nominal 50 watts / Min. 30 watts
Flatness ±1.0 dB typ. / ±1.5 dB max.
Frequency Response
DC - 1000 MHz (in two bands selected automatically or manually)
Gain 47 dB min.
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% of rated output power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 35 watts
Third Order Intercept Point 56 dBm typ.
Primary Power
90 - 132; 180 - 264 VAC
50 / 60 Hz, single phase, 700 watts max.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Remote Control 25 Pin Subminiature D on rear panel
Cooling Forced air (self contained fans)
Weight 29 kg (64 lb)
Size (WxHxD)
50.3 cm x 24.9 cm x 45.7 cm / 19.8 in x 9.8 in x 18 in

800A3A

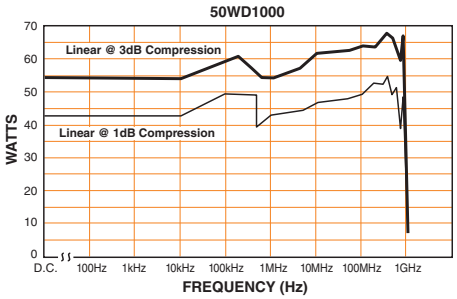
800 watts CW. 10 kHz-3 MHz.

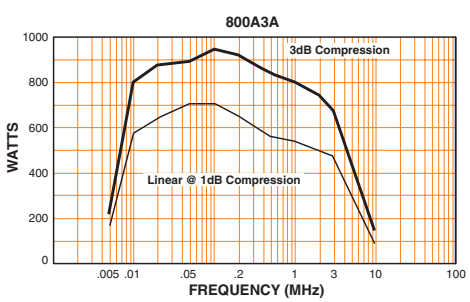
Rated Output Power 800 watts
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 800 watts Min. 700 watts, 10 kHz - 2 MHz
Min. 600 watts, 2 - 3 MHz
Power Output @ 1dB compression
Nominal 500 watts / Min. 400 watts
Flatness ± 1.0 dB max.
Frequency Response 10 kHz - 3 MHz instantaneously
Gain (at max. setting) 60 dB min.
Gain Adjustment (continuous range) 23 dB min.
Input Impedance 50 ohms, nominal
Output Impedance (switch select; manual)
12.5, 25, 50, 100, 150, 200, 400 ohms nominal
(10 kHz - 3 MHz) on front panel
Mismatch Tolerance*
Will operate without damage or oscillation with any magnitude and phase of source and load impedance. 100% of rated power without foldback up to 6.0:1 mismatch above which may limit to 400 watts reflected power.
Harmonic Distortion
Minus 20 dBc max. at 400 watts power output
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Remote Control
IEEE-488/RS-232, USB ability to remote control and power an external impedance transformer.
RF Power Display
0 - 1000 watts full scale. Directional power monitor allows separate display of forward and reflected power.
Power Monitor
BNC: 0 - 10V forward and reverse power
Cooling Forced air (self contained fans)
Primary Power Universal, 85 - 137 / 180 - 300 VAC, 47 - 63 Hz, 2500 watts max.
Weight (max.) 36.4 kg (80 lb)
Size (WxHxD)
50.3 x 34 x 55.1 cm / 19.8 x 13.4 x 21.7 in
For external impedance transformer options, see specification sheet for IT2000 Series impedance transformers.

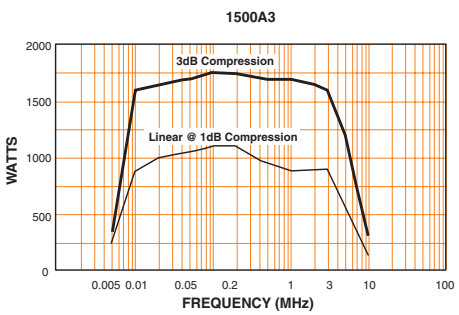
1500A3

1500 watts CW. 10 kHz-3 MHz.

Rated Output Power 1500 watts
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 1500 watts / Min. 1400 watts
Power Output @ 1dB compression
Nominal 1000 watts / Min. 800 watts
Flatness ± 1.0 dB max.
Frequency Response 10 kHz - 3 MHz instantaneously
Gain (at max. setting) 63 dB min.
Gain Adjustment (continuous range) 23 dB min.
Input Impedance 50 ohms, nominal
Output Impedance 50 ohms, nominal (10 kHz - 3 MHz)
Mismatch Tolerance*
Will operate without damage or oscillation with any magnitude and phase of source and load impedance. 100% of rated power without foldback up to 6.0:1 mismatch above which may limit to 800 watts reflected power.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Remote Control
IEEE-488/RS-232, USB ability to remote control and power an external impedance transformer
RF Power Display
0 - 2000 watts full scale. Directional power monitor allows separate display of forward and reflected power.
Power Monitor
BNC: 0 - 10V forward and reverse power
Cooling Forced air (self contained fans)
Primary Power Universal, 180 - 275 VAC, 47 - 63Hz, 5000 watts max.
Weight (max.) 136 kg (300 lb)
Size (WxHxD)
56.1 x 109.2 x 88.9 cm / 22.1 x 43 x 35 in
For external impedance transformer options, see specification sheet for IT2000 Series impedance transformers.







150A100B

150 watts CW. 10 kHz-100 MHz.

Rated Output Power 150 watts
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 220 watts / Min. 180 watts
Power Output @ 1dB compression
Nominal 155 watts / Min. 125 watts
Flatness ±1.5 dB max.
Frequency Response 10 kHz - 100 MHz instantaneously
Gain (at max. setting) 52 dB min.
Gain Adjustment Range 18 dB min.
Input Impedance 50 ohms, VSWR 1.5:1 max.
Output Impedance 50 ohms, VSWR 2.0:1 max.
Mismatch Tolerance*
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Noise Figure (above 1.0 MHz) 6 dB typ.
Harmonic Distortion
Minus 20 dBc max. at 125 watts
Third Order Intercept Point 58 dBm typ.
Primary Power
90 - 135 / 180 - 270 VAC auto ranging
47 - 63Hz, single phase, 1000 watts max.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Remote Interfaces
IEEE-488 24 pin female
RS-232 9 pin Subminiature D female
Safety Interlock 15 Pin Subminiature D
Cooling Forced air (self contained fans)
Weight 31.75 kg (70 lb)
Size (WxHxD)
50.3 x 25.2 x 46 cm / 19.8 x 9.9 x 18.1 in

600A225

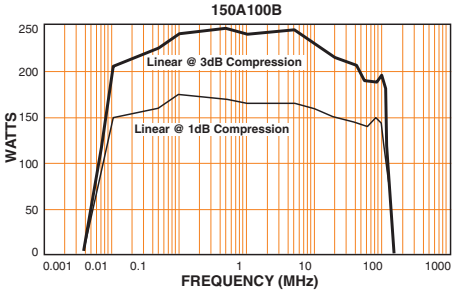
600 watts CW. 10 kHz-225 MHz.

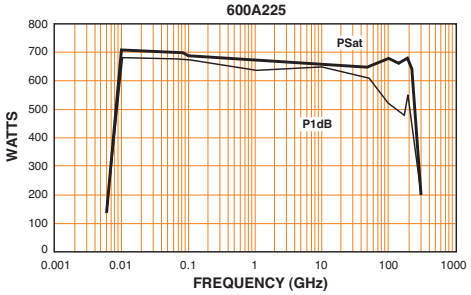
Rated Output Power 600 watts
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 600 watts / Min. 550 watts
Power Output @ 1dB compression
Nominal 550 watts / Min. 400 watts
Flatness ±2.5 dB max.
Frequency Response 10 kHz - 225 MHz instantaneously
Gain (at max. setting) 58 dB min.
Gain Adjustment (continuous range) 20 dB min.
Input Impedance 50 ohms, VSWR 1.5:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% rated power without foldback up to 6.0:1 mismatch, above which may limit to 300 watts reflective power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 400 watts
Third Order Intercept Point 65 dBm typ.
RF Power Display 0 - 750 watts full scale
Primary Power
180 - 264 VAC
47 - 63 Hz
2500 watts max. at .99 P.F. typ.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Forward Sample BNC female on front panel (coupling factor 60 dB typ.; data supplied)
Reverse Sample BNC female on front panel (coupling factor 60 dB typ.)
Remote Control
IEEE-488 24 pin female on rear panel
RS-232 9 pin female Type D on rear panel
USB Type B female
Safety Interlock 15 pin female Type D on rear panel
Cooling Forced air (self contained fans)
Weight 45.8 kg (101 lb)
Size (WxHxD)
50.3 x 34 x 56.9 cm / 19.8 x 13.4 x 22 in

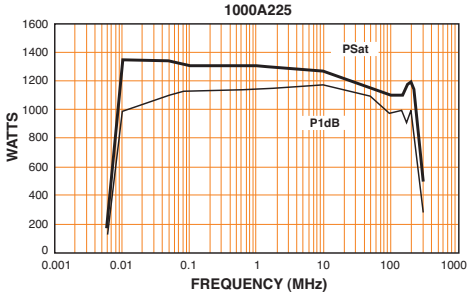
1000A225

1000 watts CW. 10 kHz-225 MHz.

Rated Output Power 1000 watts
Input For Rated Output 1.0 milliwatt max.
Power Output @ 1dB compression
Nominal 900 watts / Min. 700 watts
Flatness ±3.0 dB max.
±1.0 dB with internal leveling
Frequency Response 10 kHz - 225 MHz instantaneously
Gain (at max. setting) 60 dB min.
Gain Adjustment (continuous range) 20 dB min.
Input Impedance 50 ohms, VSWR 1.5:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% rated power without foldback up to 6.0:1 mismatch, above which may limit to 500 watts reflective power.
Harmonic Distortion Minus 20 dBc max. at 750 watts
Third Order Intercept Point 68 dBm typ.
RF Power Display 0 - 2000 watts full scale
RF Rise/Fall Time 10 nanoseconds max.
Primary Power
187 - 264 VAC
47 - 63 Hz, single phase
5000 watts max. at .95 P.F. typ.
Connectors
RF Input Type N female on rear panel
RF Output Type 7-16 DIN Female, on rear panel
Forward RF Sample Type BNC female on front panel
Reverse RF Sample Type BNC female on front panel
Remote Control
IEEE-488 24 pin female on rear panel
RS-232 9-pin female Type D on rear panel
Remote Control (Fiber Optic) ST connector, Tx and Rx RS-232
Safety Interlock 15 pin female Type D on rear panel
Cooling
Forced air (self contained fans with internal self-contained liquid cooling)
Weight 127 kg (280 lb)
Size (WxHxD)
56.1 x 109.2 x 88.9 cm / 22.1 x 43 x 35 in







2500A225

2500 watts CW. 10 kHz-225 MHz.

Rated Output Power 2500 watts, 10 kHz - 100 MHz
2500 - 1900 watts, 100 MHz - 225 MHz
(derating slope of 4.8 watts/MHz)

Input For Rated Output 1.0 milliwatt max.

Power Output for 1dB compression
2000 watts, 10 kHz - 100 MHz
2000 - 1200 watts, 100 MHz - 225 MHz
(derating slope of 6.4 watts/MHz)

Flatness ±3.0 dB max.
±1.0 dB with internal leveling

Frequency Response 10 kHz - 225 MHz instantaneously

Gain (at max. setting) 64 dB min.

Gain Adjustment (continuous range) 20 dB min.

Input Impedance 50 ohms, VSWR 1.5:1 max.

Output Impedance 50 ohms, nominal

Mismatch Tolerance*
100% rated power without foldback up to 6.0:1 mismatch, above which may limit to 1250 watts reflected power.

Harmonic Distortion Minus 20 dBc max. at 1800 watts

RF Power Display 0 - 3000 watts full scale

RF Rise Time/Fall Time 10 nanoseconds max.

Primary Power (user must specify)
187 - 264 VAC Delta (4-wire), 3-Phase, 10,000 watts max.
365 - 528 VAC, Wye (5-wire), 47 - 63 Hz

Connectors
RF Input Type N female on rear panel
RF Output Type 7-16 DIN Female on rear panel
Forward Sample Type BNC female on front panel
Reverse Sample Type BNC female on front panel
Safety Interlock 15 pin female Type D on rear panel
Remote Control
IEEE-488 24 pin female on rear panel
RS-232 15-pin female Type D on rear panel
Remote Control (Fiber Optic)
ST connector, Tx and Rx RS-232

Cooling
Forced air (self contained fans with internal self-contained liquid cooling)

Weight 159 kg (350 lb)

Size (WxHxD)
56.1 x 109.2 x 88.9 cm / 22.1 x 43 x 35 in

5000A225

5000 watts CW. 10 kHz-225 MHz.

Rated Output Power 5000 watts, 10 kHz - 50 MHz
5000 - 4000 watts, 50 MHz - 200 MHz
(derating slope from 50 MHz - 200 MHz) 6.66 watts/MHz
3500 watts, 200 MHz - 225 MHz

Input For Rated Output 1.0 milliwatt max.

Power Output for 1dB compression
3400 watts, 10 kHz - 100 MHz
3400 - 2500 watts, 100 MHz - 200 MHz
(derating slope of 9.0 watts/MHz)
2000 watts, 200 MHz - 225 MHz

Flatness ±3.0 dB max.
±1.0 dB with internal leveling

Frequency Response 10 kHz - 225 MHz instantaneously

Gain (at max. setting) 67 dB min.

Gain Adjustment (continuous range) 20 dB min.

Input Impedance 50 ohms, VSWR 1.5:1 max.

Output Impedance 50 ohms, nominal

Mismatch Tolerance*
100% rated power without foldback up to 6.0:1 mismatch above which may limit to 2500 watts reflected power, from 10 kHz to 50 MHz. Limited to 2000 watts reflected power from 50 MHz to 225 MHz.

Harmonic Distortion Minus 20 dBc max. at 3000 watts

Third Order Intercept Point 74 dBm typ.

RF Power Display 0 - 7500 watts full scale

RF Rise/Fall Time 10 nanoseconds max.

Primary Power (user must specify)
187 - 264 VAC Delta (4 wire), Wye compatible
365 - 528 VAC, Wye (5 wire)
47 - 63 Hz, 3-phase
20,000 watts max. at .95 P.F. typ.

Connectors
RF Input Type N female on rear panel
RF Output Type EIA 1-5/8 Female on rear panel
Forward Sample Type BNC female on front panel
Reverse Sample Type BNC female on front panel
Safety Interlock 15 pin female Type D on rear panel
Remote Control
IEEE-488 24 pin female on rear panel
RS-232 9-pin female Type D on rear panel
Remote Control (fiber optic)
ST connector, Tx and Rx RS-232

Cooling
Forced air (self contained fans with internal self-contained liquid cooling)

Weight 250 kg (550 lb)

Size (WxHxD)
56 x 152.4 x 97.5 cm / 22.1 x 60 x 38.4 in

10000A225

10,000 watts CW. 10 kHz-225 MHz.

Rated Output Power 10,000 watts, 10 kHz - 100 MHz
10,000 - 6000 watts, 100 MHz - 225 MHz
(derating slope of 32 watt/MHz)

Input For Rated Output 1.0 milliwatt max.

Power Output for 1dB compression
7000 watts, 10 kHz - 100 MHz
7000 - 4000 watts, 100 MHz - 225 MHz
(derating slope of 24 watts/MHz)

Flatness ±3.0 dB max.
±1.0 dB with internal leveling

Frequency Response 10 kHz - 225 MHz instantaneously

Gain (at max. setting) 70 dB min.

Gain Adjustment (continuous range) 20 dB min.

Input Impedance 50 ohms, VSWR 1.5:1 max.

Output Impedance 50 ohms, nominal

Mismatch Tolerance*
100% rated power without foldback up to 6.0:1 mismatch above which may limit to 5000 watts reflected power, from 10 kHz to 100 MHz. Limited to 3000 watts reflected power from 100 MHz to 225 MHz.

Harmonic Distortion Minus 20 dBc max. at 6000 watts

Third Order Intercept Point 77 dBm typ.

RF Power Display 0 - 15,000 watts full scale

RF Rise/Fall Time 10 nanoseconds max.

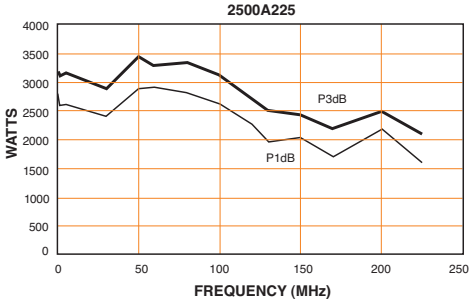
Primary Power (user must specify)
187 - 264 VAC Delta (4 wire), Wye compatible
365 - 528 VAC, Wye (5 wire)
47 - 63 Hz, 3-phase
40,000 watts max. at .95 P.F. typ.

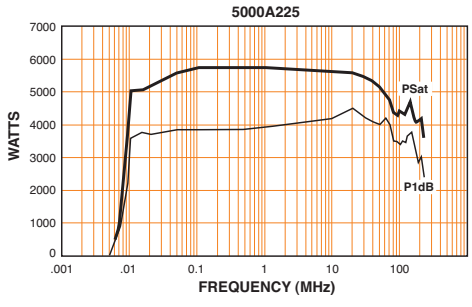
Connectors
RF Input Type N female on rear panel
RF Output Type EIA 1-5/8 Female on rear panel
Forward Sample Type BNC female on front panel
Reverse Sample Type BNC female on front panel
Safety Interlock 15 pin female Type D on rear panel
Remote Control
IEEE-488 24 pin female on rear panel
RS-232 9-pin female Type D on rear panel
Remote Control (fiber optic)
ST Connector, Tx and Rx RS-232

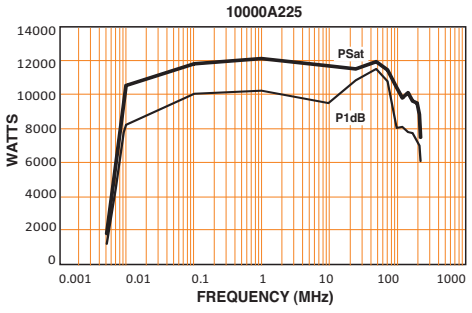
Cooling
Forced air (self contained fans with internal liquid cooling)

Weight 500 kg (1100 lb)

Size (WxHxD)
114 x 152 x 100 cm / (45 x 60 x 39.4 in)







16000A225

16,000 watts CW. 10 kHz-225 MHz.

Rated Output Power 16,000 watts, 10 kHz - 50 MHz
16,000 - 12,000 watts, 50 MHz - 225 MHz
(derating slope of 22.8 watts/MHz)

Input For Rated Output 1.0 milliwatt max.

Power Output for 1dB compression
12,000 watts, 10 kHz - 50 MHz
12,000 - 8000 watts, 50 MHz - 200 MHz
(derating slope of 26.66 watts/MHz)
6000 watts, 200 MHz - 225 MHz

Flatness ±3.0 dB max.
±1.0 dB with internal leveling

Frequency Response 10 kHz - 225 MHz instantaneously

Gain (at max. setting) 72 dB min.

Gain Adjustment (continuous range) 20 dB min.

Input Impedance 50 ohms, VSWR 1.5:1 max.

Output Impedance 50 ohms, nominal

Mismatch Tolerance*
100% rated power without foldback up to 6.0:1 mismatch, above which may limit to 8000 watts reflected power, from 10 kHz to 50 MHz. Limited to 6000 watts reflected power from 100 MHz to 225 MHz.

Harmonic Distortion Minus 20 dBc max. at 10,000 watts

Third Order Intercept Point 77 dBm typ.

RF Power Display 0 - 25,000 watts full scale

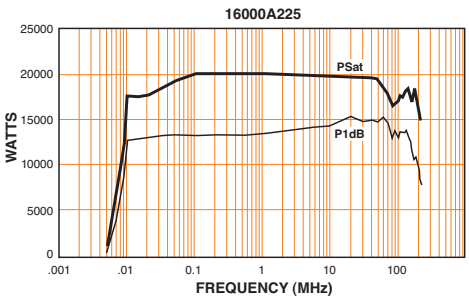
Primary Power (user must specify)
187 - 264 VAC Delta (4 wire), Wye compatible
365 - 528 VAC, Wye (5 wire)
47 - 63 Hz, 3-phase
Note that in Wye configurations neutral may be used only for low-power circuits 75,000 watts max. at .95 P.F. typ.

Connectors
RF Input Type N female on rear panel
RF Output Type EIA 3-1/8 male on rear panel
Forward Sample Type BNC female on front panel
Reverse Sample Type BNC female on front panel
Safety Interlock 15 pin female Type D on rear panel
Remote Control
IEEE-488 24 pin female on rear panel
RS-232 9-pin female Type D on rear panel
Remote Control (fiber optic)
ST connector, Tx and Rx RS-232

Cooling
Forced air (self contained fans); air-cooled w/self-contained internal liquid cooling

Weight (max.) 725 kg (1600 lb)

Size (WxHxD)
280.5 x 152.4 x 88.9 cm / 110.5 x 60 x 35 in



25A250A

25 watts CW. 10 kHz-250 MHz.

Rated Output Power 25 watts

Input For Rated Output 1.0 milliwatt max.

Power Output @ 3dB compression
Nominal 32 watts / Min. 25 watts

Power Output @ 1dB compression
Nominal 20 watts / Min. 15 watts

Flatness ±1.0 dB max.

Frequency Response 10 kHz - 250 MHz instantaneously

Gain (at max. setting) 44 dB min.

Gain Adjustment (continuous range) 18 dB min.

Input Impedance 50 ohms, VSWR 1.5:1 max.

Output Impedance 50 ohms, nominal

Mismatch Tolerance*
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.

Noise Figure (above 1.0 MHz) 16 dB typ.

Harmonic Distortion Minus 20 dBc max. at 15 watts

Third Order Intercept Point 54 dBm typ.

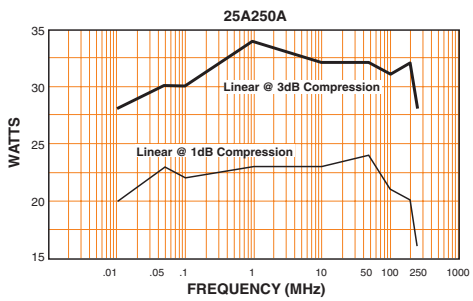
Primary Power
90 - 135 / 180 - 270 VAC
47 - 63 Hz, single phase, 200 watts max.

Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel

Cooling Forced air (self contained fans)

Weight 15.9 kg (35 lb)

Size (WxHxD)
50.3 x 15.5 x 30 cm / 19.8 x 6.1 x 11.8 in



75A250A

75 watts CW. 10 kHz-250 MHz.

Rated Output Power 75 watts

Input For Rated Output 1.0 milliwatt max.

Power Output @ 3dB compression
Nominal 100 watts / Min. 75 watts

Power Output @ 1dB compression
Nominal 70 watts / Min. 50 watts

Flatness ±1.0 dB max.

Frequency Response 10 kHz - 250 MHz instantaneously

Gain (at max. setting) 49 dB min.

Gain Adjustment (continuous range) 18 dB min.

Input Impedance 50 ohms, VSWR 1.5:1 max.

Output Impedance 50 ohms, VSWR 2.0:1 max.

Mismatch Tolerance*
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.

Noise Figure (above 1.0 MHz) 16 dB typ.

Harmonic Distortion Minus 20 dBc max. at 50 watts

Third Order Intercept Point 57 dBm typ.

Primary Power
90 - 135 / 180 - 270 VAC
47 - 63 Hz, single phase, 400 watts max.

Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel

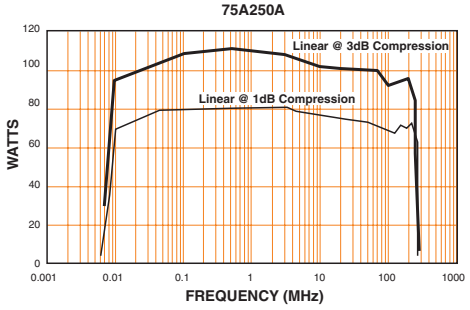
Remote Interfaces
IEEE-488 24 pin female
RS-232 9 pin Subminiature D female

Safety Interlock 15 pin Subminiature D

Cooling Forced air (self contained fans)

Weight 20.5 kg (45 lb)

Size (WxHxD)
50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in



100A250A

100 watts CW. 10 kHz-250 MHz.

Rated Output Power 100 watts
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 157 watts / Min. 125 watts
Power Output @ 1dB compression
Nominal 107 watts / Min. 75 watts
Flatness ±1.5 dB max.
Frequency Response 10 kHz - 250 MHz instantaneously
Gain (at max. setting) 50 dB min.
Gain Adjustment (continuous range) 18 dB min.
Input Impedance 50 ohms, VSWR 1.5:1 max.
Output Impedance 50 ohms, VSWR 2.0:1 max.
Mismatch Tolerance*
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance
Noise Figure (above 1.0 MHz) 10 dB typ.
Harmonic Distortion Minus 20 dBc max. at 75 watts
Third Order Intercept Point 58 dBm typ.
Primary Power
90 - 135 / 180 - 270 VAC autoranging
47 - 63 Hz, single phase, 1000 watts max.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Remote Interfaces
IEEE-488 24 pin female
RS-232 9 pin Subminiature D female
Safety Interlock 15 pin Subminiature D
Cooling Forced air (self contained fans)
Weight 31.75 kg (70 lb)
Size (WxHxD)
50.3 x 25.2 x 46 cm / 19.8 x 9.9 x 18.1 in

500A250B

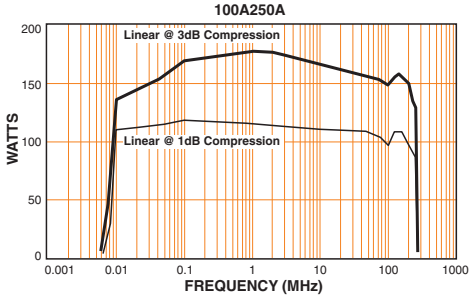
500 watts CW. 10 kHz-250 MHz.

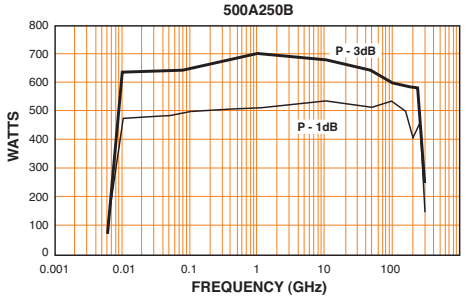
Rated Output Power 500 watts
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 600 watts / Min. 500 watts
Power Output @ 1dB compression
Nominal 500 watts / Min. 350 watts
Flatness ±3.0 dB max.
Frequency Response 10 kHz - 250 MHz instantaneously
Gain (at max. setting) 57 dB min.
Gain Adjustment (continuous range) 10 dB min.
Input Impedance 50 ohms, VSWR 1.5:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% rated power without foldback up to 6.0:1 mismatch, above which may limit to 250 watts reflected power. Will operate without damage, or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 350 watts
Third Order Intercept Point 65 dBm typ.
RF Power Display 0 - 750 watts full scale
Primary Power
180 - 264 VAC
47 - 63 Hz, 2500 watts max. @ 0.99 P.F. typ.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Forward Sample Type BNC female on front panel
Reverse Sample Type BNC female on front panel
Safety Interlock 15 pin female Type D on rear panel
Remote Control
IEEE-488 24 pin female on rear panel
RS-232 9 pin female Type D on rear panel
USB Type B female
Cooling Forced air (self contained fans)
Weight 45.8 kg (101 lb)
Size (WxHxD)
50.3 x 34 x 56.9 cm / 19.8 x 13.4 x 22 in

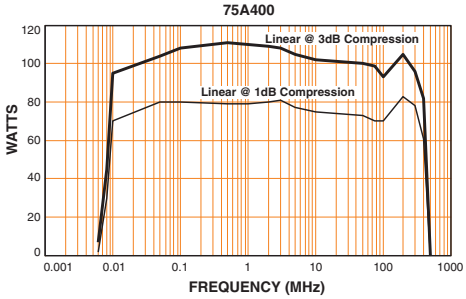
75A400

75 watts CW. 10 kHz-400 MHz.

Rated Output Power 75 watts min.
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 100 watts / Min. 75 watts
Power Output @ 1dB compression
Nominal 75 watts / Min. 50 watts
Flatness ±1.5 dB max.
Frequency Response 10 kHz - 400 MHz instantaneously
Gain (at max. setting) 49 dB min.
Gain Adjustment (continuous range) 18 dB min.
Input Impedance 50 ohms, VSWR 1.5:1 max.
Output Impedance 50 ohms, VSWR 2.0:1 max.
Mismatch Tolerance*
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Noise Figure (above 1.0 MHz) 6 dB typ.
Harmonic Distortion Minus 20 dBc max. at 50 watts
Third Order Intercept Point 57 dBm typ.
Primary Power
90 - 135 / 180 - 270 VAC
47 - 63 Hz, single phase, 400 watts max.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Remote Interfaces
IEEE-488 24 pin female
RS-232 9 pin Subminiature D female
Safety Interlock 15 pin Subminiature D
Cooling Forced air (self contained fans)
Weight 23.4 kg (51.5 lb)
Size (WxHxD)
50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in







200A400

200 watts CW. 10 kHz-400 MHz.

Rated Output Power 200 watts, 10 kHz - 250 MHz
200 - 175 watts, 250 MHz - 400 MHz (derated slope of .167W/MHz)
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 175 watts, 10 kHz - 250 MHz
175-150 watts, 250 MHz-400 MHz (derated slope of .167W/MHz)
Power Output @ 1dB compression
Nominal 150 watts, 10 kHz - 250 MHz
150-125 watts, 250 MHz - 400 MHz (derated slope of .167W/MHz)
Flatness ±3.5 dB max.
Frequency Response
10 kHz - 400 MHz instantaneously
Gain (at max. setting) 53 dB min.
Gain Adjustment Range 20 dB min.
Input Impedance 50 ohms, VSWR 1.5:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% rated power without foldback up to 6.0:1 mismatch, above which may limit to 100W reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Pulse Mode Gating Characteristics
Signal (into 50 ohms) +3.0 to 6.0 VDC
Harmonic Distortion Minus 20 dBc max. at 100 watts
Third Order Intercept Point 65 dBm typ.
Primary Power
180 - 264 VAC
47 - 63 Hz, 1250 watts max. @ 0.99 P.F. typ.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Forward Sample BNC female on front panel (coupling factor 60 dB typ.; data supplied)
Reverse Sample BNC female on front panel (coupling factor 60 dB typ.)
Remote Control
IEEE-488 24 pin female on rear panel
RS-232 9 pin female Type D on rear panel
USB Type B female
Safety Interlock 15 pin female Type D on rear panel
Cooling Forced air (self-contained fans)
Weight 45.8 kg (101 lb)
Size (WxHxD)
50.3 x 34 x 56.9 cm / 19.8 x 13.4 x 22 in

400A400

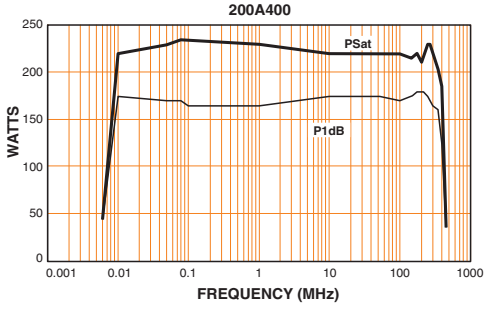
400 watts CW. 10 kHz-400 MHz.

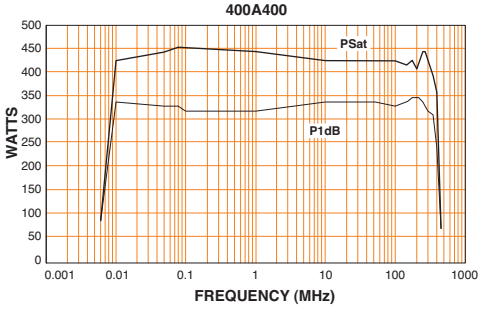
Rated Output Power 400 watts, 10 kHz - 250 MHz
400 - 350 watts, 250 MHz - 400 MHz (derated slope of .33W/MHz)
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 350 watts, 10 kHz - 250 MHz
350-300 watts, 250 MHz-400 MHz (derated slope of .33W/MHz)
Power Output @ 1dB compression
Nominal 275 watts, 10 kHz - 250 MHz
275-225 watts, 250 MHz - 400 MHz (derated slope of .33W/MHz)
Flatness ±3.5 dB max.
Frequency Response
10 kHz - 400 MHz instantaneously
Gain (at max. setting) 56 dB min.
Gain Adjustment Range 20 dB min.
Input Impedance 50 ohms, VSWR 1.5:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% rated power without foldback up to 6.0:1 mismatch, above which may limit to 200W reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 250 watts
Third Order Intercept Point 65 dBm typ.
Primary Power
180 - 264 VAC
47 - 63 Hz, 2500 watts max. @ 0.99 P.F. typ.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Forward Sample BNC female on front panel (coupling factor 60 dB typ.; data supplied)
Reverse Sample BNC female on front panel (coupling factor 60 dB typ.)
Remote Control
IEEE-488 24 pin female on rear panel
RS-232 9 pin female Type D on rear panel
USB Type B female
Safety Interlock 15 pin female Type D on rear panel
Cooling Forced air (self-contained fans)
Weight 45.8 kg (101 lb)
Size (WxHxD)
50.3 x 34 x 56.9 cm / 19.8 x 13.4 x 22 in

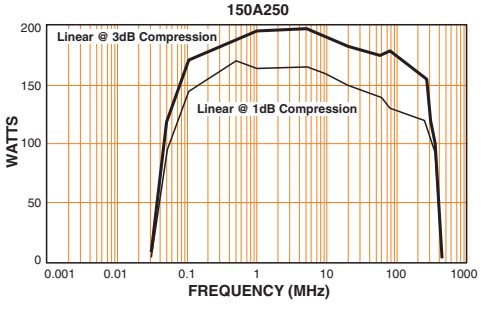
150A250

150 watts CW. 100 kHz-250 MHz.

Rated Output Power 150 watts min.
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 180 watts / Min. 155 watts
Power Output @ 1dB compression
Nominal 150 watts / Min. 120 watts
Flatness ±1.5 dB max.
Frequency Response
100 kHz - 250 MHz instantaneously
Gain (at max. setting) 52 dB min.
Gain Adjustment Range 20 dB min.
Input Impedance 50 ohms, VSWR 1.5:1 max.
Output Impedance 50 ohms, VSWR 2.0:1 max.
Mismatch Tolerance*
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 120 watts
Third Order Intercept Point 58 dBm typ.
Primary Power
90 - 135 / 180 - 270 VAC auto ranging
47 - 63Hz, single phase, 1000 watts max.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Remote Interfaces
IEEE-488 24 pin female
RS-232 9 pin subminiature D female
Safety Interlock 15 pin subminiature D
Cooling Forced air (self-contained fans)
Weight 31.75 kg (70 lb)
Size (WxHxD)
50.3 x 25.2 x 46 cm / 19.8 x 9.9 x 18.1 in







100 kHz to 400 MHz

100 kHz to 1000 MHz

100A400

100 watts CW. 100 kHz-400 MHz.

Rated Output Power 100 watts min.
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 130 watts / Min. 100 watts
Power Output @ 1dB compression
Nominal 100 watts / Min. 75 watts
Flatness ±1.5 dB max.

Frequency Response
100 kHz - 400 MHz instantaneously
Gain (at max. setting) 50 dB min.
Gain Adjustment (continuous range) 20 dB min.
Input Impedance 50 ohms, VSWR 1.5:1 max.
Output Impedance 50 ohms, VSWR 2.0:1 typ.
Mismatch Tolerance*
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion
Minus 20 dBc max. at 75 watts
Third Order Intercept Point 58 dBm typ.
Primary Power
90 - 135 / 180 - 270 VAC auto ranging
47 - 63Hz, single phase, 1000 watts max.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Remote Interfaces
IEEE-488 24 pin female
RS-232 9 pin Subminiature D female
Safety Interlock 15 pin Subminiature D
Cooling Forced air (self contained fans)
Weight 36 kg (80 lb)
Size (WxHxD)
50.3 x 25.2 x 46 cm / 19.8 x 9.9 x 18.1 in

150A400

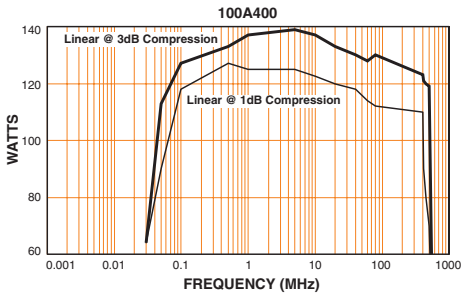
150 watts CW. 100 kHz-400 MHz.

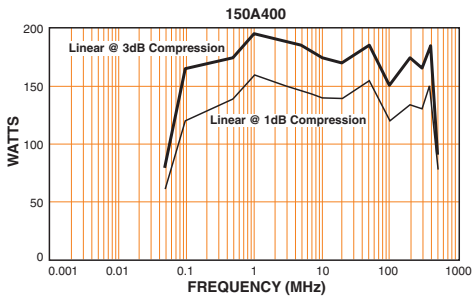
Rated Output Power 150 watts min.
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 155 watts / Min. 130 watts
Power Output @ 1dB compression
Nominal 125 watts / Min. 100 watts
Flatness ±1.5 dB max.
Frequency Response
100 kHz - 400 MHz instantaneously
Gain (at max. setting) 52 dB min.
Gain Adjustment Range 20 dB min.
Input Impedance 50 ohms, VSWR 1.5:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 100 watts
Third Order Intercept Point 58 dBm typ.
Primary Power
90 - 135 / 180 - 270 VAC auto ranging
47 - 63Hz, single phase, 1000 watts max.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Remote Interfaces
IEEE-488 24 pin female
RS-232 9 pin Subminiature D female
Safety Interlock 15 pin Subminiature D
Cooling Forced air (self contained fans)
Weight 36 kg (80 lb)
Size (WxHxD)
50.3 x 25.2 x 46 cm / 19.8 x 9.9 x 18.1 in

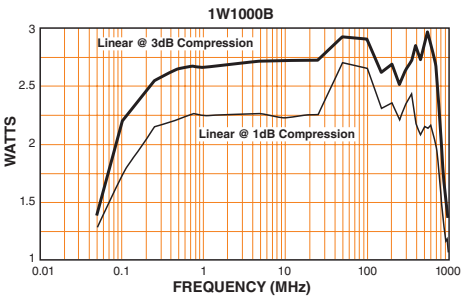
1W1000B

1 watt CW. 100 kHz-1000 MHz.

Rated Output Power 1.0 watts min.
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 2.5 watts / Min. 1.0 watts
Power Output @ 1dB compression
Nominal 2 watts / Min. 1.0 watts
Flatness ±0.5 dB typ. / ±1.0 dB max.
Frequency Response 100 kHz - 1000 MHz instantaneously
Gain (at max. setting) 30 dB min.
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 1.0 watts
Third Order Intercept Point 42 dBm typ.
Primary Power
90 - 264 VAC
47 - 440 Hz, single phase, 60 watts max.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Cooling Forced air (self-contained fan)
Weight 4.5 kg (10 lb)
Size (WxHxD)
26 x 11.7 x 21.6 cm / 10.3 x 4.6 x 8.5 in







10W1000C

10 watts CW. 500 kHz-1000 MHz.

Rated Output Power 10 watts min.
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 20 watts / Min. 10 watts
Power Output @ 1dB compression
Nominal 17 watts / Min. 10 watts
Flatness ±1.0 dB typ. / ±1.5 dB max.
Frequency Response
500 kHz - 1000 MHz instantaneously
Gain (at max. setting) 40 dB min.
Gain Adjustment (continuous range)
20 dB min. (4096 steps remote)
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 10 watts
Third Order Intercept Point 50 dBm typ.
Primary Power
90 - 132, 180 - 264 VAC
50 / 60 Hz, single phase, 300 watts max.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Remote Interfaces
IEEE-488 24 pin female
RS-232 9 pin Subminiature D female
Safety Interlock 15 Pin Subminiature D
Cooling Forced air (self contained fans)
Weight 20.5 kg (45 lb)
Size (WxHxD)
50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in.

30W1000B

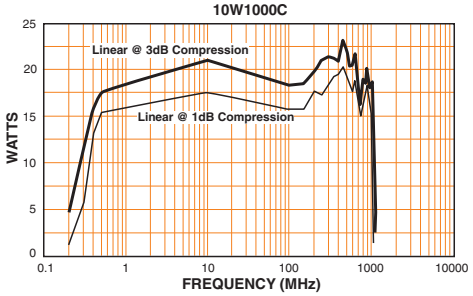
30 watts CW. 1-1000 MHz.

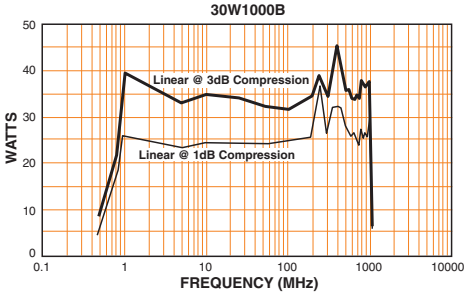
Rated Output Power 30 watts min.
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 36 watts / Min. 30 watts
Power Output @ 1dB compression
Nominal 27 watts / Min. 20 watts
Flatness ±1.0 dB typ. / ±1.5 dB max.
Frequency Response 1 - 1000 MHz instantaneously
Gain (at max. setting) 45 dB min.
Gain Adjustment (continuous range)
20 dB min. (4096 steps remote)
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 25 watts
Third Order Intercept Point 52 dBm typ.
Primary Power
90 - 132, 180 - 264 VAC
50 / 60 Hz, single phase, 325 watts max.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Remote Interfaces
IEEE-488 24 pin female
RS-232 9 pin Subminiature D female
Safety Interlock 15 Pin Subminiature D
Cooling Forced air (self contained fans)
Weight 20.5 kg (45 lb)
Size (WxHxD)
50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in

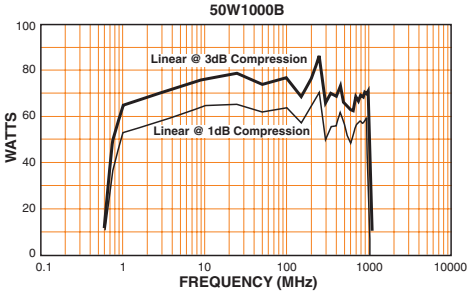
50W1000B

50 watts CW. 1-1000 MHz.

Rated Output Power 50 watts min.
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 70 watts / Min. 50 watts
Power Output @ 1dB compression
Nominal 55 watts / Min. 40 watts
Flatness ±1.0 dB typ. / ±1.5 dB max.
Frequency Response 1 - 1000 MHz instantaneously
Gain (at max. setting) 47 dB min.
Gain Adjustment (continuous range)
20 dB min. (4096 steps remote)
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion
Minus 20 dBc max. at 50 watts
Third Order Intercept Point 57 dBm typ.
Primary Power
90 - 132, 180 - 264 VAC
50 / 60 Hz, single phase, 600 watts max.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Remote Interfaces
IEEE-488 24 pin female
RS-232 9 pin Subminiature D female
Safety Interlock 15 Pin Subminiature D
Cooling Forced air (self contained fans)
Weight 25.9 kg (57 lb)
Size (WxHxD)
50.3 x 20.3 x 45.7 cm / 19.8 x 8 x 18.1 in







80 to 1000 MHz

100W1000B

100 watts CW. 1-1000 MHz.

Rated Output Power 100 watts
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 123 watts / Min. 100 watts
Power Output @ 1dB compression
Nominal 95 watts / Min. 75 watts
Flatness
±2.0 dB max. / 1.5 dB typ.
±0.8 dB with internal leveling
Frequency Response
1 - 1000 MHz instantaneously
Gain (at max. setting) 50 dB min.
Gain Adjustment (continuous range)
18 dB min. (4096 steps remote)
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 80 watts
Third Order Intercept Point 58 dBm typ.
RF Power Display 0 - 200 watts
Primary Power
90 - 264 VAC
40 / 400 Hz, single phase, 1200 watts max.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Remote Interfaces
IEEE-488 24 pin female
RS-232 9 pin Subminiature D female
ALC & Pulse Type BNC on front panel
Safety Interlock 15 pin Subminiature D
Cooling Forced air (self contained fans)
Weight 40 kg (88 lb)
Size (WxHxD)
50.3 x 24.9 x 53 cm / 19.8 x 9.8 x 21.1 in

150W1000

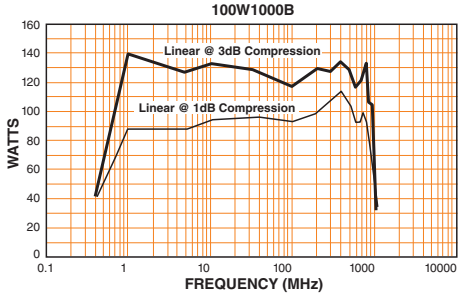
150 watts CW. 80-1000 MHz.

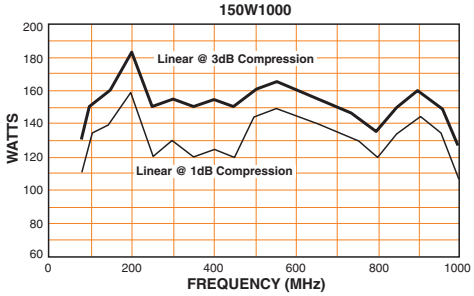
Rated Output Power 150 watts
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 140 watts / Min. 120 watts
Power Output @ 1dB compression
Nominal 120 watts / Min. 100 watts
Flatness
±2.0 dB max. / 1.5 dB typ.
±0.8 dB with internal leveling
Frequency Response 80 - 1000 MHz instantaneously
Gain (at max. setting) 52 dB min.
Gain Adjustment (continuous range)
18 dB min. (4096 steps remote)
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
Will operate without damage or oscillation with any magnitude and phase of source and load impedance. Will limit reflected power to 100 watts.
Harmonic Distortion Minus 20 dBc max. at 100 watts
Third Order Intercept Point 58 dBm typ.
RF Power Display 0 - 200 watts
Primary Power
90 - 264 VAC
40 / 400 Hz, single phase, 1200 watts max.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Remote Interfaces
IEEE-488 24 pin female
RS-232 9 pin Subminiature D female
ALC & Pulse Type BNC on front panel
Safety Interlock 15 pin Subminiature D
Cooling Forced air (self contained fans)
Weight 40 kg (88 lb)
Size (WxHxD)
50.3 x 24.9 x 53 cm / 19.8 x 9.8 x 21.1 in

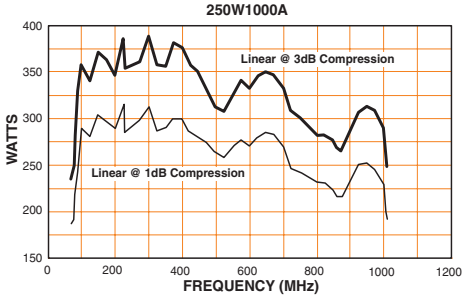
250W1000A

250 watts CW. 80-1000 MHz.

Rated Output Power 250 watts min.
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
Nominal 310 watts / Min. 250 watts
Power Output @ 1dB compression
Nominal 255 watts / Min. 200 watts
Flatness ±2.0 dB max. / ±1.5 dB typ.
Frequency Response 80 - 1000 MHz instantaneously
Gain (at max. setting) 54 dB min.
Gain Adjustment (continuous range)
18 dB min. (4096 steps remote)
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion
Minus 20 dBc max. at 200 watts
Third Order Intercept Point 62 dBm typ.
Primary Power (user must specify)
120 - 240 VAC
40 / 400 Hz, single phase, 2200 watts max.
Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel
Remote Interfaces
IEEE-488 24 pin female
RS-232 9 pin subminiature D female
Fiber Optic ST connector, Tx and Rx RS-232
ALC & Pulse Type BNC on front panel
Safety Interlock 15 pin subminiature D on rear panel
Cooling Forced air (self contained fans)
Weight 86.2 kg (190 lb)
Size (WxHxD)
50.3 x 47 x 61 cm / 19.8 x 18.5 x 24 in







500W1000A

500 watts CW. 80-1000 MHz.

Rated Output Power	525 watts min.
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	
Nominal 612 watts / Min. 450 watts	
Power Output @ 1dB compression	
Nominal 515 watts / Min. 350 watts	
Flatness	±2.0 dB max. / ±0.8 dB with internal leveling
Frequency Response	80 - 1000 MHz instantaneously
Gain (at max. setting)	57 dB min.
Gain Adjustment (continuous range)	18 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance*	
100% of rated power without foldback up to 6.0:1 mismatch above, which may limit to 250 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.	
Harmonic Distortion	Minus 20 dBc max. at 400 watts
Third Order Intercept Point	63 dBm typ.
RF Power Display	0 - 600 watts full scale
Primary Power	
200 - 250 VAC, 50 / 60 Hz, single phase, 6500 VA max.	
Connectors	
RF Input	Type N female on rear panel
RF Output	Type N female on rear panel
External Leveling Inputs	Type BNC female on front panel
Pulse Modulation Input	Type BNC female on front panel
Detected RF Output	Type BNC female on front panel
Safety Interlock	15 pin subminiature D on rear panel
Remote Computer Interface	24 pin IEEE-488 (GPIB) connector and RS-232 connector on rear panel
Remote Computer Interface (fiber optic)	ST Conn Tx and Rx RS-232
Cooling	Forced air (self contained fans)
Weight	174 kg (383 lb)
Size (WxHxD)	
56.1 x 149.9 x 58.4 cm / 22.1 x 59 x 23 in	

1000W1000D

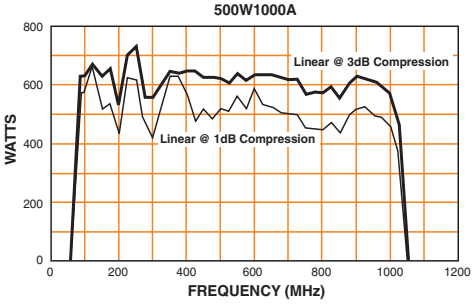
1000 watts CW. 80-1000 MHz.

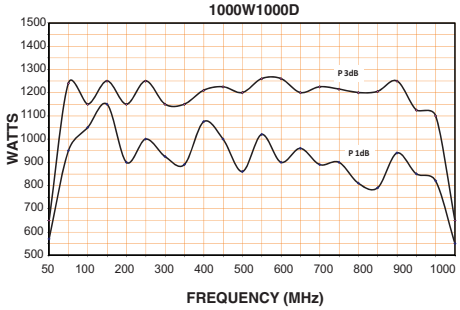
Rated Output Power	1000 watts min.
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	
Nominal 1200 watts / Min. 950 watts	
Power Output @ 1dB compression	
Nominal 950 watts / Min. 700 watts	
Flatness	±2.0 dB max. / ±0.8 dB with internal leveling
Frequency Response	80 - 1000 MHz instantaneously
Gain (at max. setting)	60 dB min.
Gain Adjustment (continuous range)	18 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance*	
100% of rated power without foldback up to 6.0:1 mismatch above, which may limit to 600 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.	
Harmonic Distortion	Minus 20 dBc max. at 800 watts
Third Order Intercept Point	66 dBm typ.
RF Power Display	0 - 1200 watts full scale
Primary Power (user must specify)	
200 - 240 VAC, Delta (4 wire)	
360 - 435 VAC, Wye (5 wire)	
50 / 60 Hz, 3 phase, 12 kVA max.	
Connectors	
RF Input	Type N female on rear panel
RF Output	Type 7/16 female on rear panel
External Leveling Inputs	Type BNC female on front panel
Pulse Modulation Input	Type BNC female on front panel
Detected RF Output	Type BNC female on front panel
Remote Computer Interface	24 pin female IEEE-488 (GPIB) and RS-232 connectors on rear panel
Remote Computer Interface (fiber optic)	ST connector, Tx and Rx RS-232
Safety Interlock	15 pin subminiature D on rear panel
Operate Interface	27 pin subminiature D on rear panel
Cooling	Forced air (self contained fans)
Weight (approximate)	340 kg (750 lb)
Size (WxHxD)	
68.8 x 152.5 x 82.5 cm / 27.1 x 60 x 32.5 in	

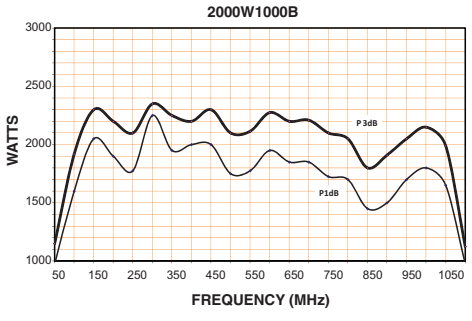
2000W1000B

2000 watts CW. 80-1000 MHz.

Rated Output Power	1900 watts min.
Input For Rated Output	1.0 milliwatts max.
Power Output @ 3dB compression	
Nominal 2100 watts / Min. 1700 watts	
Power Output @ 1dB compression	
Nominal 1750 watts / Min. 1250 watts	
Flatness	±2.5 dB max. / ±0.8 dB with internal leveling
Frequency Response	80 - 1000 MHz instantaneously
Gain (at max. setting)	63 dB min.
Gain Adjustment (continuous range)	18 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance*	
100% of rated power without foldback up to 6.0:1 mismatch above, which may limit to 1000 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.	
Harmonic Distortion	Minus 20 dBc max. at 1600 watts
Third Order Intercept Point	70 dBm typ.
RF Power Display	0 - 2500 watts
Primary Power (user must specify)	
200 - 250 VAC, Delta (4 wire)	
360 - 435 VAC, Wye (5 wire)	
50 / 60 Hz, 3 phase, 25 kVA max.	
Connectors	
RF Input	Type N female on rear panel
RF Output	Type 1 5/8 EIA on rear panel
External Leveling Inputs	Type BNC female on front panel
Pulse Modulation Input	Type BNC female on front panel
Detected RF Output	Type BNC female on front panel
Safety Interlock	15 pin female subminiature D on rear panel
Remote Computer Interface	24 pin female IEEE-488.2 (GPIB) connector on rear panel
Remote Computer Interface (fiber optic)	ST connector, Tx and Rx RS-232
Cooling	Forced air (self contained fans)
Weight (approximate)	839 kg (1850 lb)
Size (WxHxD) (3 cabinets)	
201 x 158 x 160 cm / 79 x 62 x 63 in	







3000W1000A

3000 watts CW. 80-1000 MHz.

Rated Output Power 2800 watts min.
Input For Rated Output 1.0 milliwatts max.
Power Output @ 3dB compression
Nominal 3000 watts / Min. 2400 watts
Power Output @ 1dB compression
Nominal 2500 watts / Min. 1850 watts
Flatness ±2.5 dB max. / ±0.8 dB with internal leveling
Frequency Response 80 - 1000 MHz instantaneously
Gain (at max. setting) 65 dB min.
Gain Adjustment (continuous range) 18 dB min.
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% of rated power without foldback up to 6.0:1 mismatch above, which may limit to 1500 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 2400 watts
Third Order Intercept Point 72 dBm typ.
RF Power Display 0 - 4500 watts
Primary Power (user must specify)
200 - 250 VAC, Delta (4 wire)
360 - 435 VAC, Wye (5 wire)
50 / 60 Hz, 3 phase, 37 kVA max.
Connectors
RF Input: Type N female on front panel
RF Output: Type 1 5/8 EIA on rear panel
External leveling inputs: Type BNC female on front panel
Pulse modulation input: Type BNC female on front panel
Detected RF output: Type BNC female on front panel
Safety interlock: 15 pin female subminiature D on rear panel
Remote Computer Interface: 24 pin female GPIB/IEEE-488 and 9 pin RS-232 connectors on rear panel
Remote Computer Interface (fiber optic): ST connector, Tx and Rx RS-232
Cooling Forced air (self contained fans)
Weight (approximate) 1453 kg (2625 lb)
Size (WxHxD) (4 cabinets)
272 x 158 x 160 cm / 107 x 62 x 63 in

4000W1000A

4000 watts CW. 80-1000 MHz.

Rated Output Power 3700 watts min.
Input For Rated Output 1.0 milliwatts max.
Power Output @ 3dB compression
Nominal 4400 watts / Min. 3400 watts
Power Output @ 1dB compression
Nominal 3500 watts / Min. 2500 watts
Flatness ±2.5 dB max. / ±0.8 dB with internal leveling
Frequency Response 80 - 1000 MHz instantaneously
Gain (at max. setting) 66 dB min.
Gain Adjustment (continuous range) 18 dB min.
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% of rated power without foldback, up to 6.0:1 mismatch above which may limit to 2000 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 3200 watts
Third Order Intercept Point 73 dBm typ.
RF Power Display 0 - 6000 watts
Primary Power (user must specify)
200 - 250 VAC, Delta (4 wire)
360 - 435 VAC, Wye (5 wire)
50 / 60 Hz, 3 phase, 48 kVA max.
Connectors
RF input: Type N female on front panel
RF output: Type 1 5/8 EIA on rear panel
External leveling inputs: Type BNC female on front panel
Pulse modulation input: Type BNC female on front panel
Detected RF output: Type BNC female on front panel
Safety interlock: 15 pin female subminiature D on rear panel
Remote Computer Interface: 24 pin female GPIB/IEEE-488 and 9 pin RS-232 connectors on rear panel
Remote Computer Interface (fiber optic): ST connector, Tx and Rx RS-232
Cooling Forced air (self contained fans)
Weight (approximate) 1542 kg (3400 lb)
Size (WxHxD) (5 cabinets)
340 x 158 x 163 cm / 134 x 62 x 64 in